SECTION 9-03, AGGREGATES
February 5, 1996

9-03.1(4)C Grading
The third sentence of the fourth paragraph is revised to read:

> Coarse aggregate shall contain no piece of greater size than two times the maximum sieve size for the specified grading measured along the line of greatest dimension.

9-03.8(6)A Basis of Acceptance
In No. 3, under heading "Tolerance Limits", the first sentence is revised to read:

> The tolerance limit for each mix constituent shall not exceed the broad band specification limits specified in Section 9-03.8(6), except the tolerance limits for sieves designated as 100% passing will be 99-100.

9-03.11 Recycled Concrete Rubble
The title of this section is revised to read:

> ***9-03.11 Recycled Portland Cement Concrete Rubble***

References to recycled concrete in the first, second, and sixth paragraphs are revised to read:

> recycled Portland cement concrete

The third paragraph is revised to read:

> A maximum of 20 percent by weight of recycled asphalt concrete pavement may be used in the blended product. The asphalt concrete content is calculated as the amount of asphalt concrete particles retained on all screens 1/4 inch and above.

9-03.14 Gravel Borrow
This section is deleted in its entirety and replaced with the following:

> **9-03.14 Borrow**
>
> ***9-03.14(1) Gravel Borrow***
>
> Aggregate for gravel borrow shall consist of granular material, either naturally occurring or processed, and shall meet the following requirements for grading and quality:

Sieve Size	Percent Passing
4" square[1]	100
U.S. No. 4	50-90
U.S. No. 40	30 max.
U.S. No. 200	7.0 max.
Sand Equivalent	50 min.

> All percentages are by weight.

[1]For geosynthetic reinforced walls or slopes, the maximum particle size shall be limited to 1 1/4".

9-03.14(2) Select Borrow

Material for select borrow shall consist of granular material, either naturally occurring or processed, and shall meet the following requirements for grading and quality:

Sieve Size	Percent Passing
6" square[1,2]	100
U.S. No. 40	50 max.
U.S. No. 200	10.0 max.
Sand Equivalent	25 min.

All percentages are by weight.

[1]For geosynthetic reinforced slopes, the maximum particle size shall be limited to 1 1/4".

[2]The maximum particle size shall be limited to 4" when select borrow is used in the top 2 feet of embankments or where Method C compaction is required.

9-03.14(3) Common Borrow

Material for common borrow shall consist of granular or non-granular soil and/or aggregate which is free of deleterious material and is non-plastic.

Deleterious material includes wood, organic waste, coal, charcoal, or any other extraneous or objectionable material.

The material shall be considered non-plastic if the percent by weight passing the U.S. No. 200 sieve does not exceed 15% or if the soil fraction passing the U.S. No. 40 sieve cannot be rolled, at any moisture content, onto a thread as prescribed in Section 4 of AASHTO Standard Test Designation T 90. If requested by the Contractor, the plasticity may be increased with the approval of the Engineer if it is determined that an increased plasticity will be satisfactory for the specified embankment construction.

The material shall not contain more than 3% organic material by weight.

9-03.15 Bedding Material for Rigid Pipe

The second paragraph is revised to read:

If, in the opinion of the Engineer, the native granular material is free from wood waste, organic material, and other extraneous or objectionable materials, it may be used for pipe bedding. The material shall have a maximum dimension of 1 1/2 inches.

9-03.21 Recycled Material

This section is supplemented with the following:

9-03.21(2) Recycled Glass Aggregate

Aggregate composed solely of glass may be used as gravel backfill for walls, pipe bedding, and sand drains; sand drainage blanket; gravel borrow; and bedding material for flexible pipe.

One hundred percent of the glass shall pass a 3/4 inch square sieve and not more than 5 percent by mass shall pass a U.S. No. 200 sieve. Sieve analysis shall be conducted according to WSDOT Test Method 103-C on at least a quarterly basis by the product supplier. All test results shall be kept on file by the product supplier.

The maximum debris level shall be 10 percent. Debris is defined as any deleterious material which impacts the performance of the engineered fill and includes all non-glass constituents of the glass feed stock. The percentage of debris in cullet shall be quantified using the following visual method. Approximately 200 grams of processed cullet shall be placed in a flat pan or plate. The percentage of debris shall be estimated using AGI Data Sheets 15.1 and 15.2 "Comparison Charts for Estimating Percentage Composition", by the American Geological Institute, 1982.

Total lead content testing shall be performed quarterly by the product supplier. Tests shall include a minimum of 5 samples. Sample collection shall be conducted according to ASTM D 75. The mean of these tests shall not exceed 80 ppm. Total lead content testing will be conducted according to EPA Method 3010/6010. All test results shall be kept on file by the product supplier.